FIGURE 1: Typical database Configuration, without dBSwitch
(Prior Art)
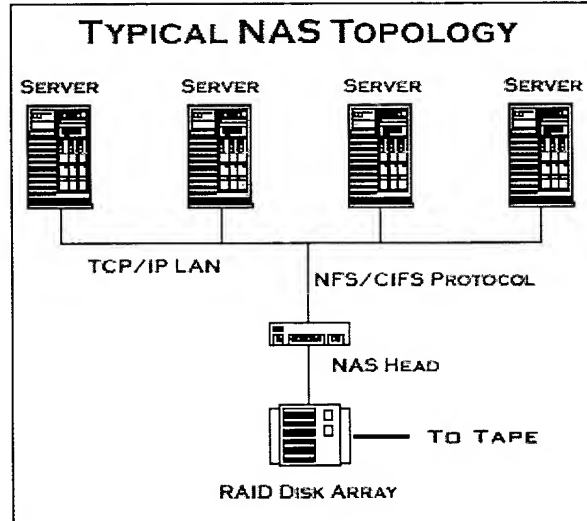

FIGURE 2: illustration of a NAS topology
(Prior Art)
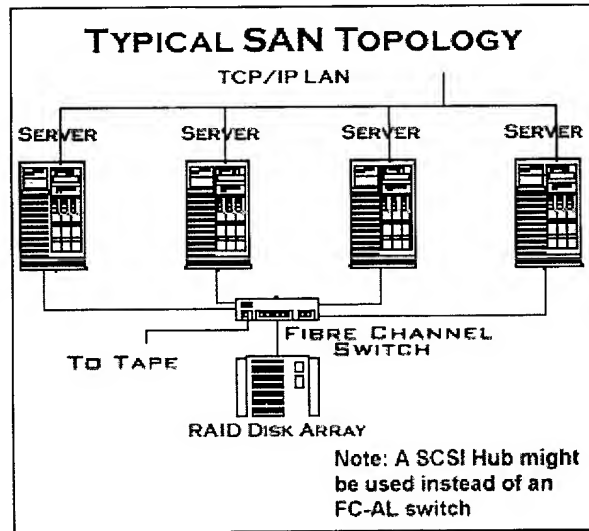
TYPICAL SAN TOPOLOGY

TCP/IP LAN

SERVER   SERVER   SERVER   SERVER

FIBRE CHANNEL SWITCH

TO TAPE

RAID DISK ARRAY

Note: A SCSI Hub might be used instead of an FC-AL switch

FIGURE 3: illustration of a SAN topology
(Prior Art)

43   43   43

Client   Client   Client

48   Layer-2 Switch

42

Router + NAT   dBSwitch Software   dBSwitch

49

Layer-2 Switch

41   41   41

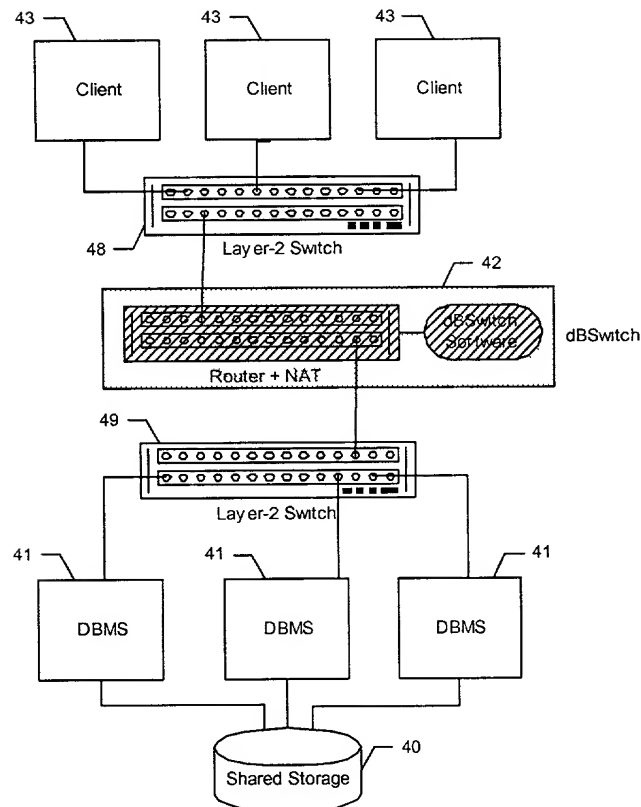DBMS   DBMS   DBMS

40

Shared Storage

FIGURE 4: dBSwitch in the Middle
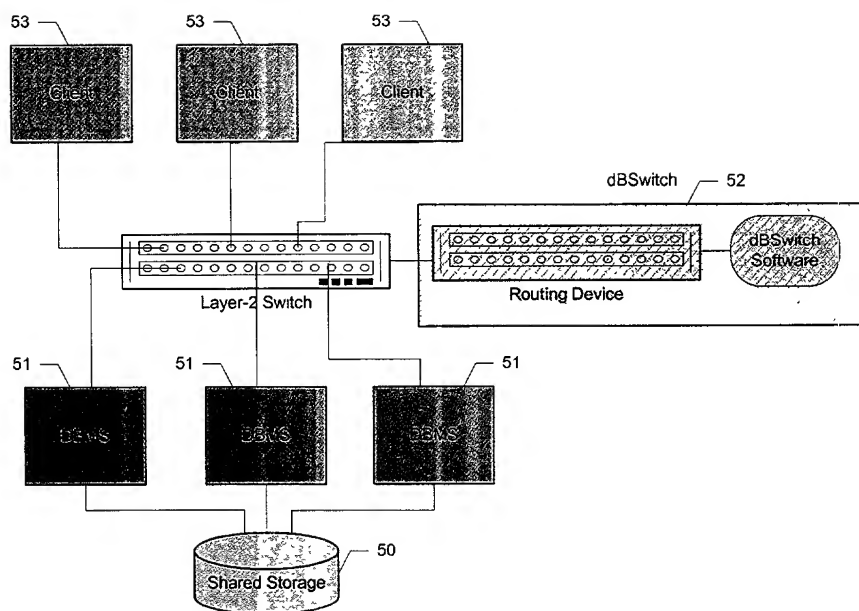
FIGURE 5: dBSwitch on the Side
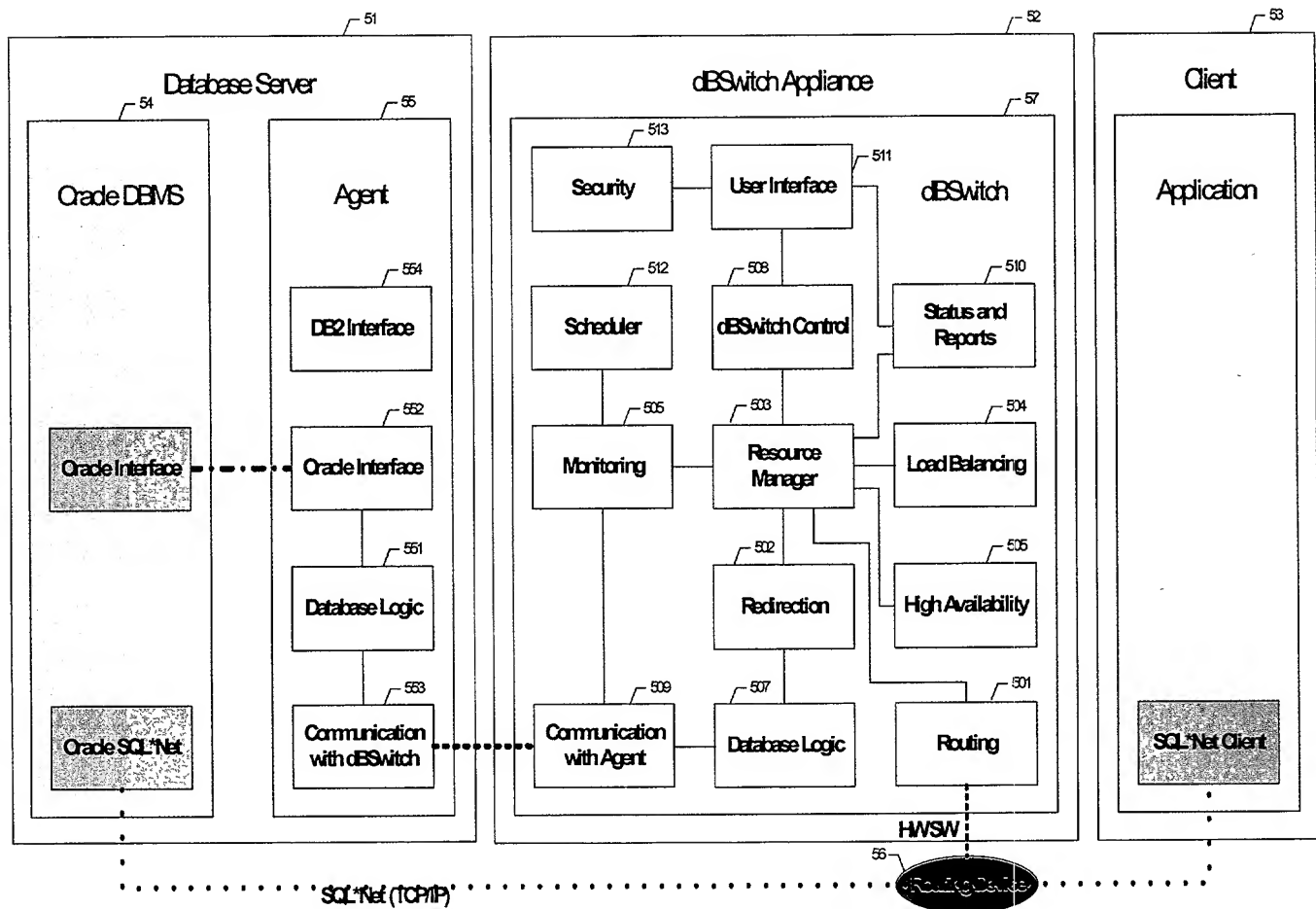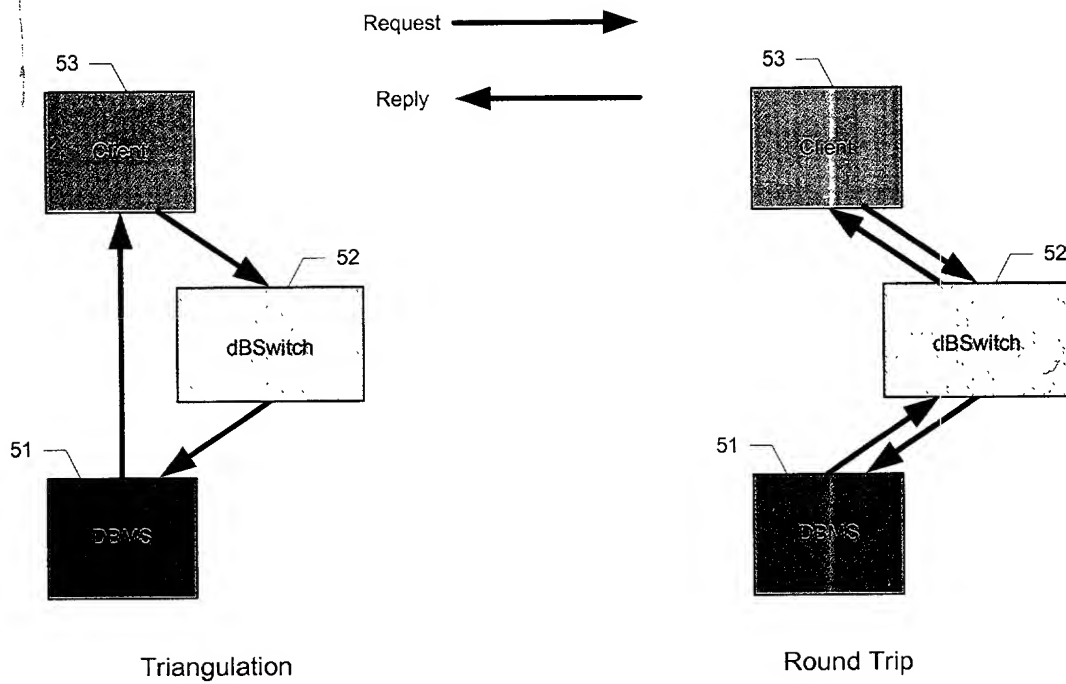
FIGURE 6: dBSwitch Components

Request →

Reply ←

53

Client

52

dBSwitch

51

DBMS

Triangulation

53

Client

52

dBSwitch

51

DBMS

Round Trip

FIGURE 7: Packet Routing

Client Networks Unchanged

Client ... Client

Client ... Client
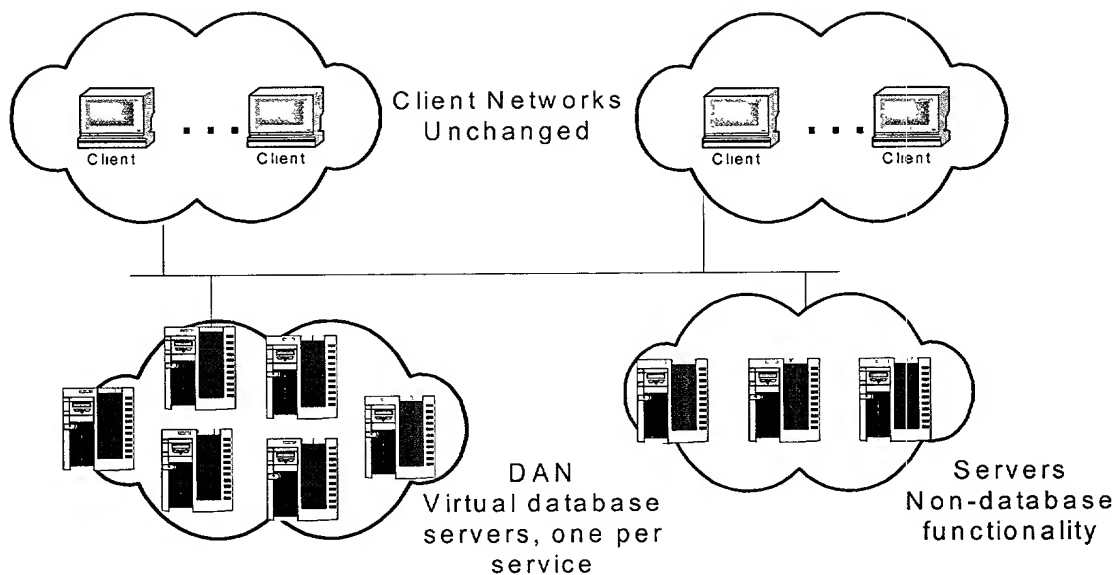
DAN
Virtual database servers, one per service

Servers
Non-database functionality

FIGURE 8: Virtual Database Servers Abstraction